AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, wherein the flux barriers pass through a third or fourth area between the first and second areas and detour around the axis coupling hole ~~so that intervals between the axis coupling hole and the flux barrier are substantially uniform~~,

wherein the flux barriers detour around the axis coupling hole in a circular arc shape.

2. (Cancelled)

3. (Currently Amended) The rotor of claim 1 ~~or 2~~, wherein the flux barriers are continuous.

4. (Original) The rotor of claim 1, wherein the flux barriers are symmetric on a second axis vertical to the first axis on the core plane.

5. (Original) The rotor of claim 1, wherein a rate of an area of the flux barriers to a whole area of the core plane is 0.35 to 0.45.

6. (Original) The rotor of claim 5, wherein the rate of the area is 0.39.

7. (Original) The rotor of claim 1, wherein a rate of a whole width of the flux barriers to a width between the axis coupling hole and the outer circumference of the core is 0.35 to 0.45.

8. (Original) The rotor of claim 7, wherein the rate of the width is 0.405.

9. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals;

wherein central lines of one and the other ends of the flux barriers and central lines of the bars which the flux barriers approach are disposed in the same directions, the central lines of the bars facing the center of the core.

10. (Original) The rotor of claim 9, wherein the central lines of the bars and the central lines of the flux barriers are formed on the same lines.

11. (Previously Presented) The rotor of claim 1, wherein a width of the flux barriers is equal to or smaller than that of the bars which the flux barriers approach.

12. (Original) The rotor of claim 1, wherein intervals between the flux barriers and the bars which the flux barriers approach are constant

13. (Original) The rotor of claim 12, wherein the intervals are less than 0.35mm.

14. (Original) The rotor of claim 1, wherein a width of the outer circumferences of the bars adjacent to the outer circumference of the core is larger than that of the inner circumferences of the bars adjacent to the flux barriers.

15. (Original) The rotor of claim 1, wherein some of the bars in the first and second areas are not adjacent to the flux barriers.

16. (Original) The rotor of claim 1, wherein intervals between the bars and the outer circumference of the core are all the same.

17. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core;

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals; and

a plurality of sub flux barriers formed between the bars in the third and fourth areas.

18. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals;

wherein an area of the bars in the third and fourth areas is smaller than that of the bars in the first and second areas.

19. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals;

wherein intervals between the bars in the third and fourth areas are smaller than those between the bars in the first and second areas.

20. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals;

wherein a width of the outer circumferences of the bars in the third and fourth areas is larger than that of the outer circumferences of the bars in the first and second areas.

21. (Previously Presented) The rotor of claim 1, wherein an angle of the first and second areas is 100 to 110°.

22. (Original) The rotor of claim 21, wherein the angle is 104°.

23. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers, one and the other ends of the flux barriers approaching the bars formed in first and second areas facing each other at a predetermined angle on a central line of a first axis on a core plane vertical to the coupling direction, at least parts of the centers of the flux barriers passing through a third or fourth area between the first and second areas, surrounding the axis coupling hole at predetermined intervals;

wherein a length of the bars in the first and second areas is larger than that of the bars in the third and fourth areas.

24. (Original) The rotor of claim 23, wherein at least one flux barrier is formed between a common tangent line of the inner circumferences of the bars in the first and second areas and a common tangent line of the inner circumferences of the bars in the third and fourth areas.

25. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, central lines of the bars facing the center of the core and central lines of both

ends of the flux barriers being formed in the same directions, the flux barriers being spaced apart from the axis coupling hole.

26. (Previously Presented) The rotor of claim 25, wherein the central lines of the bars and the central lines of both ends of the flux barriers are formed on the same lines, and the flux barriers are spaced apart from the corresponding bars.

27. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core;

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, central lines of the bars facing the center of the core and central lines of both ends of the flux barriers being formed in the same directions; and

a plurality of sub flux barriers formed between the bars disposed in a vertical direction to an alignment direction of the flux barriers.

28. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, central lines of the bars facing the center of the core and central lines of both ends of the flux barriers being formed in the same directions;

wherein an area of the bars disposed in the vertical direction to the alignment direction of the flux barriers is smaller than that of the bars disposed in the alignment direction of the flux barriers.

29. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, central lines of the bars facing the center of the core and central lines of both ends of the flux barriers being formed in the same directions;

wherein intervals between the bars disposed in the vertical direction to the alignment direction of the flux barriers are smaller than those between the bars disposed in the alignment direction of the flux barriers.

30. (Previously Presented) The rotor of claim 25, wherein a width of the outer circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers is larger than that of the outer circumferences of the bars disposed in the alignment direction of the flux barriers.

31. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, central lines of the bars facing the center of the core and central lines of both ends of the flux barriers being formed in the same directions;

wherein a length of the bars disposed in the alignment direction of the flux barriers is larger than that of the bars disposed in the vertical direction to the alignment direction of the flux barriers.

32. (Original) The rotor of claim 31, wherein at least one flux barrier is formed between a common tangent line of the inner circumferences of the bars disposed in the alignment direction of the flux barriers and a common tangent line of the inner circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers.

33. (Original) The rotor of claim 25, wherein a width of the flux barriers is equal to or smaller than that of the bars disposed in the alignment direction of the flux barriers.

34. (Currently Amended) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, a width of the flux barriers being substantially equal to or smaller than that of the bars which both ends of the flux barriers approach.

wherein a width of the outer circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers is larger than that of the outer circumferences of the bars disposed in the alignment direction of the flux barriers.

35. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core;

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, a width of the flux barriers being equal to or smaller than that of the bars which both ends of the flux barriers approach; and

a plurality of sub flux barriers formed between the bars disposed in a vertical direction to an alignment direction of the flux barriers.

36. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, a width of the flux barriers being equal to or smaller than that of the bars which both ends of the flux barriers approach;

wherein an area of the bars disposed in the vertical direction to the alignment direction of the flux barriers is smaller than that of the bars disposed in the alignment direction of the flux barriers.

37. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, a width of the flux barriers being equal to or smaller than that of the bars which both ends of the flux barriers approach;

wherein intervals between the bars disposed in the vertical direction to the alignment direction of the flux barriers are smaller than those between the bars disposed in the alignment direction of the flux barriers.

38. (Currently Amended) The rotor of ~~claim 34~~claim 35, wherein a width of the outer circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers is larger than that of the outer circumferences of the bars disposed in the alignment direction of the flux barriers.

39. (Previously Presented) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers having their both ends aligned in one direction to approach the bars, respectively, a width of the flux barriers being equal to or smaller than that of the bars which both ends of the flux barriers approach;

wherein a length of the bars disposed in the alignment direction of the flux barriers is larger than that of the bars disposed in the vertical direction to the alignment direction of the flux barriers.

40. (Original) The rotor of claim 39, wherein at least one flux barrier is formed between a common tangent line of the inner circumferences of the bars disposed in the alignment direction of the flux barriers and a common tangent line of the inner circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers.

41. (Original) A rotor for a line-start reluctance motor, comprising:

a core having an axis coupling hole in a coupling direction of a shaft;

a plurality of bars formed in the periphery of the core; and

a plurality of flux barriers aligned in one direction, a length of the bars disposed in an alignment direction of the flux barriers being larger than that of the bars disposed in a vertical direction to the alignment direction of the flux barriers.

42. (Original) The rotor of claim 41, wherein at least one flux barrier is formed between a common tangent line of the inner circumferences of the bars disposed in the alignment direction of the flux barriers and a common tangent line of the inner circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers.

43. (Original) The rotor of claim 41, wherein the flux barriers are formed between the bars disposed in the vertical direction to the alignment direction of the flux barriers.

44. (Original) The rotor of claim 41 or 43, wherein an area of the bars disposed in the vertical direction to the alignment direction of the flux barriers is smaller than that of the bars disposed in the alignment direction of the flux barriers.

45. (Original) The rotor of claim 41 or 43, wherein intervals between the bars disposed in the vertical direction to the alignment direction of the flux barriers are smaller than those between the bars disposed in the alignment direction of the flux barriers.

46. (Original) The rotor of claim 41 or 43, wherein a width of the outer circumferences of the bars disposed in the vertical direction to the alignment direction of the flux barriers is larger than that of the outer circumferences of the bars disposed in the alignment direction of the flux barriers.

47. (Previously Presented) The rotor of claim 34, wherein the width of the flux barriers are substantially constant.